

Supporting California Dairies and other Animal Feeding Operations



OVERVIEW

California dairies produce more milk, butter, ice cream, Nonfat dry milk, and whey protein concentrate than any other state in the Nation, and rank second in cheese production, with an overall industry total of \$7.6 billion in retail sales in 2013. Approximately one out of every five dairy cows in the U.S. lives in California.

USDA's Natural Resources Conservation Service (NRCS) is a non-regulatory agency with the mission of "Helping People Help the Land" by offering technical expertise and financial assistance. NRCS Farm Bill programs have a lot to offer dairies and other Animal Feeding Operations (AFOs). AFOs typically have stockpiled manure on site that must be managed. Conservation assistance through planning and Farm Bill programs can help farmers with resource concerns both in headquarters areas where animals are confined and in surrounding cropland areas that receive nutrient rich manure generated on-farm.

Between 2005 and 2013 the NRCS in California worked with the dairy industry to develop and implement plans to protect water quality and other resources such as soil and plant health. More than \$52 million was invested in conservation on California dairies using the Environmental Quality Incentives Program (EQIP) and the former Agricultural Water Enhancement Program (AWEP). Nearly all of California's 1,750 dairy producers participated in one of these efforts to enhance natural resources and to comply with environmental regulation.

The new 2014 Farm Bill continues to offer dairy, poultry, livestock and other animal feeding operations technical and financial assistance using a streamlined set of program options. While EQIP and Conservation Innovation Grants are still available in the new Farm Bill, AWEP and the Cooperative Conservation Partnership Initiative (CCPI), have been incorporated into the new Regional Conservation Partnership Program (RCP).

CONSERVATION PLANNING

Every agricultural producer has a unique set of business and conservation goals. Conservation planning allows producers to sit down with NRCS conservationists and discuss goals, options for achieving those goals, and a timetable for implementing the steps to do so. Conservation practices are selected and installed to address identified resource concerns, such as water quality or soil erosion. These NRCS conservation practices have been compiled and validated through 80 years of on-the-ground experience. Projects based on this upfront planning work have a history of being successful and thus, producers with a conservation plan will typically receive priority for Farm Bill funding. Plans are voluntary and are a work in progress.

"CNMP FIRST!"

A Comprehensive Nutrient Management Plan (CNMP) is a part of a good conservation plan for AFO operations. The CNMP is a plan to protect water quality, improve soil health, and promote a sustainable operation by managing manure and the nutrients in it.

A CNMP is designed to help producers implement infrastructural and management improvements on the facility, taking a holistic approach to addressing many aspects of the animal feeding operation. The CNMP focuses on nutrient impacts to surrounding resources like ground and surface water quality.

Developing a CNMP begins with a comprehensive resource assessment of current site conditions. Management options and structural alternatives are developed to address identified resource concerns. The CNMP and NRCS representatives assist the producer in planning, prioritizing and scheduling of improvements while maintaining confidentiality.



AGRICULTURAL ENERGY MANAGEMENT PLAN

Saving energy saves money. Agricultural Energy Plans are tailored to each facility and look for opportunities to improve energy efficiencies. Dairy milk barns and other animal housing structures consume a lot of energy and are one good place to examine for energy savings opportunities. Specific areas examined for energy savings include barn ventilation and lighting, heating and cooling of livestock production facilities, manure collection and transfer, grain drying, better plate coolers, and other on-farm activities.

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP)

EQIP remains the principal program for delivering conservation technical and financial assistance to private landowners to address natural resource concerns and improve soil, water, plant, animal, air and energy-related resources on agricultural land. EQIP is a voluntary program that supports the needs of agricultural operations by offering ideas, solutions, and guidance for a successful and sustainable conservation operation.

While technical assistance is available to all producers, EQIP is a competitive program, and funding is not guaranteed. Projects are generally ranked for environmental benefits. When applying for EQIP, especially when applying for the first time, producers will need to fill out forms providing USDA with information that confirms that they are eligible to participate in these public-funded programs. USDA employees can help with the legal and financial forms that will make it possible to apply for funding.

REGIONAL CONSERVATION PARTNERSHIP PROGRAM (RCPP)

RCPP is a new, comprehensive and flexible program that uses partnerships to stretch and multiply conservation investments and reach conservation goals on a regional or watershed scale.

NRCS supports locally driven projects and encourages landowners and producers to get involved in the design of project proposals submitted through RCPP. USDA Service Centers, resource conservation districts, and local water and irrigation districts may know whether a project is being proposed in your area. Beginning in fall 2014, NRCS will post selected RCPP projects at <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp/>. Farmers and ranchers, located within project areas will be able to contact their local USDA Service Center to find out how to apply for financial assistance. The project partner will also conduct outreach to landowners and producers and will be able to provide assistance with applying to NRCS programs.

Conservation Practices Available

NRCS offers technical and financial assistance on several conservation practices useful in supporting dairies and other confined livestock operations. Here are seven of the most common.



WASTE STORAGE FACILITY

An impoundment to temporarily store wastes such as manure, wastewater, and contaminated runoff. Examples include waste storage lagoons, concrete storage tanks for manure, and well-drained concrete stacking areas for manure or silage.



ROOFS AND COVERS

A cover or roof structure placed over a waste management facility as a means to divert clean water away from manured areas.



MANURE TRANSFER

A system using structures, conduits or equipment to convey wastes from agricultural operations to points of usage. Components may include manure pumps, pipelines, sand traps, concrete conveyance lanes, and process pits to improve solid separation.



WASTE SEPARATION FACILITY

A filtration or screening device, settling tank, settling basin, or settling channel used to partition solids and nutrients from a waste stream protects water and air quality and makes the end product more manageable for use on cropland and other purposes.



TAIL WATER RETURN SYSTEM

A facility to collect, store, and transport irrigation tailwater for reuse in a farm irrigation system can help to keep manured runoff or phosphorus from entering surface waters.



NUTRIENT MANAGEMENT

A program to help farmers determine how and when to apply nutrients based on proper soil and manure testing and tracking.



IRRIGATION WATER MANAGEMENT

An irrigation system for frequent application of small quantities of water on or below the soil surface can help farmers to use water and nutrients in the most efficient way.

For more information on NRCS Farm Bill conservation programs, visit:

www.nrcs.usda.gov/wps/portal/nrcs/main/ca/programs/